

CLAIMS

What is claimed is:

1.

A passive transfer guide for shifting specimen carriers from a first continuous loop conveyor to a second continuous loop conveyor, and back again, comprising:
a generally horizontally oriented "H"- shaped central member having a pair of upper legs, a pair of lower legs, and a cross-member connecting the upper and lower legs;
the upper legs and an upper portion of the cross-member having a smooth continuous vertical surface forming a "U"-shaped horizontally oriented guide rail for directing a specimen carrier therealong; and
the lower legs and a lower portion of the cross-member having a smooth continuous vertical surface forming an inverted "U"-shaped horizontally oriented guide rail oriented in an opposite direction to the upper legs.

2.

The passive transfer guide of claim 1, wherein said cross-member upper portion has a smooth, arcuate U-shaped arch formed therein interconnecting the upper legs.

3.

The passive transfer guide of claim 1, wherein said cross-member lower portion has a smooth, arcuate inverted U-shaped arch formed therein interconnecting the lower legs.

4.

The passive transfer guide of claim 1, further comprising an inverted U-shaped insert having a pair of legs extending from a juncture, the insert positioned between the lower legs of the central member to form an inverted U-shaped lane for directing specimen carriers.

5.

The passive transfer guide of claim 4, wherein said inverted U-shaped insert and central member are coplanar.

6.

The passive transfer guide of claim 5, wherein the legs of said inverted U-shaped insert are substantially parallel to and uniformly spaced apart from the lower legs of the central member.

7.

The passive transfer guide of claim 6, further comprising a U-shaped insert having a pair of legs extending from a juncture, the insert positioned between the upper legs of the central member to form a U-shaped lane for directing specimen carriers.

8.

The passive transfer guide of claim 7, wherein said U-shaped insert and central member are coplanar.

9.

The passive transfer guide of claim 8, wherein the legs of said U-shaped insert are substantially parallel to and uniformly spaced apart from the upper legs of the central member.

10.

In combination:

a first continuous loop track with a first continuous loop conveyor thereon, said first conveyor operably mounted on said track with an upper support surface forming a substantially horizontal drive plane;

a second continuous loop track with a second continuous loop conveyor thereon, said second conveyor operably mounted on said track with an upper support surface forming a substantially horizontal drive plane;

said first and second loop conveyors oriented with at least one portion of each loop tangent one another, forming a section of tangency;

said first and second loops conveyors operable such that the respective conveyors are moving in opposite directions with the drive planes being substantially coplanar at the section of tangency;

said first loop having a pair of inward and outward spaced apart guide rails above the first conveyor, forming a lane for directing specimen carriers transported on the first conveyor;

said second loop having a pair of inward and outward spaced apart guide rails above the second conveyor, forming a lane for directing specimen carriers transported on the second conveyor; and

a passive transfer guide oriented in the section of tangency with a first guide lane for directing a specimen carrier from the first conveyor to the second carrier, and a second guide lane for directing a specimen carrier from the second conveyor to the first conveyor.

11.

The combination of claim 10, wherein said passive transfer guide includes:
a generally horizontally oriented "H"- shaped central member having a pair of upper legs, a pair of lower legs, and a cross-member connecting the upper and lower legs;
the upper legs and an upper portion of the cross-member having a smooth continuous vertical surface forming a "U"-shaped horizontally oriented guide rail extending from the inward guide rail of the second conveyor, through the section of tangency and thence to the inward guide rail of the first conveyor, for directing a specimen carrier therealong; and
the lower legs and a lower portion of the cross-member having a smooth continuous vertical surface forming an inverted "U"-shaped horizontally oriented guide rail extending from the inward guide rail of the first conveyor, through the section of

tangency and thence to the inward guide rail of the second conveyor, and oriented in an opposite direction to the upper legs.

12.

The combination of claim 11, wherein said cross-member upper portion has a smooth, arcuate U-shaped arch formed therein interconnecting the upper legs.

13.

The combination of claim 11, wherein said cross-member lower portion has a smooth, arcuate inverted U-shaped arch formed therein interconnecting the lower legs.

14.

The combination of claim 11, further comprising an inverted U-shaped insert having a pair of legs extending from a juncture to each of the outward guide rails of the first and second loops, the insert positioned between the lower legs of the central member to form an inverted U-shaped lane for directing specimen carriers.

15.

The combination of claim 14, wherein said inverted U-shaped insert and central member are coplanar.

16.

The combination of claim 15, wherein the legs of said inverted U-shaped insert are substantially parallel to and uniformly spaced apart from the lower legs of the central member.

17.

The combination of claim 16, further comprising a U-shaped insert having a pair of legs extending from a juncture to each of the outward guide rails of the first and second loops, the insert positioned between the upper legs of the central member to form a U-shaped lane for directing specimen carriers.

18.

The combination of claim 17, wherein said U-shaped insert and central member are coplanar.

19.

The combination of claim 18, wherein the legs of said U-shaped insert are substantially parallel to and uniformly spaced apart from the upper legs of the central member.